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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/559,478	04/27/2000	Richard A. Simon	81020F-P	1867
1333 7590 02/06/2007 PATENT LEGAL STAFF EASTMAN KODAK COMPANY 343 STATE STREET ROCHESTER, NY 14650-2201			EXAMINER STORK, KYLE R	
			ART UNIT 2178	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			02/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/559,478	SIMON, RICHARD A.	
	Examiner	Art Unit	
	Kyle R. Stork	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This non-final office action is in response to the Appeal Brief filed 14 December 2006.

2. Claims 1-2 and 4-31 are pending. Claims 1, 16, 22-25, and 27 are independent claims.

The rejection of claims 1-2, 4, 6-7, 9, 16, 22-25, and 27-31 under 35 USC 103 over Long et al. (US 2002/0095439, filed 20 February 1998, hereafter Long) and further in view of Kuchta (US 5805777, patented 8 September 1998) has been withdrawn.

The rejection of claims 5, 8, 10-12, and 14-15 under 35 USC 103 over Long and Kutcha, and further in view of Rzepkowski et al. (US 6741270, filed 19 January 2000) has been withdrawn.

The rejection of claims 17-21 under 35 USC 103 over Long and Kutcha, and further in view of Arledge, Jr. et al. (US 6535294, filed 23 June 1998) has been withdrawn.

The rejection of claims 13 and 26 under 35 USC 103 over Long and Kutcha, and further in view of Bolnick et al. (US 6043817, filed 30 September 1997) has been withdrawn.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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Claims 22 and 27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Section 2106 of the MPEP states:

(b) Nonfunctional Descriptive Material

Descriptive material that cannot exhibit any functional interrelationship with the way in which computing processes are performed does not constitute a statutory process, machine, manufacture or composition of matter and should be rejected under 35 U.S.C. 101. Thus, Office personnel should consider the claimed invention as a whole to determine whether the necessary functional interrelationship is provided.

Where certain types of descriptive material, such as music, literature, art, photographs and mere arrangements or compilations of facts or data, are merely stored so as to be read or outputted by a computer without creating any functional interrelationship, either as part of the stored data or as part of the computing processes performed by the computer, then such descriptive material alone does not impart functionality either to the data as so structured, or to the computer. Such "descriptive material" is not a process, machine, manufacture or composition of matter. (Data consists of facts, which become information when they are seen in context and convey meaning to people. Computers process data without any understanding of what that data represents. Computer Dictionary 210 (Microsoft Press, 2d ed. 1994).)

The policy that precludes the patenting of nonfunctional descriptive material would be easily frustrated if the same descriptive material could be patented when claimed as an article of manufacture. For example, music is commonly sold to consumers in the format of a compact disc. In such cases, the known compact disc acts as nothing more than a carrier for nonfunctional descriptive material. The purely nonfunctional descriptive material cannot alone provide the practical application for the manufacture.

Office personnel should be prudent in applying the foregoing guidance. Nonfunctional descriptive material may be claimed in combination with other functional descriptive multi-media material on a computer-readable medium to provide the necessary functional and structural interrelationship to satisfy the requirements of 35 U.S.C. 101. The presence of the claimed nonfunctional descriptive material is not necessarily determinative of nonstatutory subject matter. For example, a computer that recognizes a particular grouping of musical notes read from memory and upon recognizing that particular sequence, causes another defined series of notes to be played, defines a functional interrelationship among that data and the computing processes performed when utilizing that data, and as such is statutory because it implements a statutory process.

Claims 22 and 27 disclose a "computer software product (line 1 of claims 22 and 27 respectively)." This computer software product fails to disclose a functional relationship with a machine, manufacture, or composition of matter as required by 35 USC 101. Therefore, the computer software product of claims 22 and 27 are classified as nonfunctional descriptive material, and are consequently non-statutory.

The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly neither a series of steps or acts as required in order to be a process, nor are they a combination of chemical compounds to be a combination of matter as required in order to be a composition of matter. Therefore, they fail to fall within a statutory category. They are, at best, function descriptive material, *per se*. Thus, the claim is non-statutory as not being tangibly embodied in a manner so as to be executable.

It is recommended that the applicant amend the claims to include a functional relationship between the "computer software product," and some form of computing device, either by embodying the "computer software product" upon a computer readable medium that when executed by a computing device causes the limitations to be performed within the computing device, or by embodying the "computer software product" in a computing device, wherein when the "computer software product" is executed, causes the limitations to be performed by the computing device.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1-2, 4, 6-7, 9, 16, 22-25, and 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Long et al. (US 2002/0095439, filed 20 February 1998, hereafter Long) and further in view of Kuchta (US 5805777, patented 8 September 1998).

As per independent claim 1, Long discloses a method of organizing a plurality of digital images in a predetermined page format utilizing a software program running on a computer, comprising the steps of:

- Grouping a plurality of digital images into a plurality of different page layouts (Figures 1 and 2: Here, a plurality of possible page layouts are shown), each of the page layout comprising:
 - Arranging the images to be nonoverlapping on a page layout (paragraphs 0047 and 0069)
 - Determining an amount of white space on the page layout (paragraphs 0048-0049: Here, the distribution of white space is balanced in both the horizontal and vertical directions. In order to balance white space in these directions, it must first be determined the amount of white space)
- Wherein any one of the plurality of images may be located in any position in the plurality of page layouts, each of the page layouts capable of being printed and having white space between the plurality of digital images (paragraph 0040: Here, the images are randomly placed into the layout pattern; paragraphs 0048-0049: Here, the images have white space surrounding them. The white space is

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then balanced in both the vertical and horizontal directions; paragraph 0044 and 0105: Here, a printer is disclosed)

- Selecting a page layout having an amount of white space from the plurality of different page layouts (paragraphs 0045-0053: Here, the layout is adjusted according to rules, including rules based upon spatial balance of white space both horizontally and vertically)

Long fails to specifically disclose scaling the images to fit a page layout having a minimal amount of white space. However, Kuchta discloses scaling the images to fit a page layout having a minimal amount of white space (column 12, lines 57-62). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Kuchta with Long, since it would have allowed a user to fit images to a page for printing without changing the image's aspect ratio (Kuchta: column 12, lines 57-62). Further it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Kutchta with Long, since it would have allowed a user to fit a larger number of non-overlapping images on a single page for printing.

Long fails to specifically disclose selecting the layout having minimal white space. However, it was notoriously well known in the art at the time of the applicant's invention that it is advantageous to minimize white space on a page, thereby reducing the amount of wasted space. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Long with the well known

idea of minimizing white space, since it would have allowed a user to reduce the amount of wasted space.

As per dependent claim 2, Long discloses a method further comprising placing the plurality of digital images in the selected page layout (paragraphs 0036-0037: Here, the images are arranged on the page. The selected page layout (adjust page layout) involves the rearranging of images in accordance with the rules).

As per dependent claim 4, Long discloses a further comprising scoring each of the different page layouts (paragraph 0055-0060).

As per dependent claim 6, Long discloses the method wherein the amount of white space is minimized by using stochastic algorithms (paragraphs 0036-0063: Here, an initial layout is selected at random (stochastic)).

As per dependent claim 7, Long discloses the method wherein the different page layout includes placing images in a non-overlapping pattern (paragraph 0047: Here, no overlapping on a page is allowed).

As per dependent claim 9, Long discloses the method wherein analyzing of different page layouts comprises an iteration of comparing two different page layouts and selecting the best page layout until little or no further improvement in scoring is obtained (Figure 11).

As per independent claim 16, the applicant discloses the limitations similar to those in claim 1. Long further discloses a first computer for composing a plurality of digital images on a page (paragraph 0044). Claim 16 is similarly rejected under Long.

As per independent claim 22, the applicant discloses the limitations similar to those in claim 1. Claim 22 is similarly rejected under Long.

As per independent claim 23, the applicant discloses the limitations similar to those in claim 1. Long further discloses providing a plurality of digital images and selecting a number of digital images for placement (paragraph 0066: Here, a plurality of images are selected for placement). Claim 23 is similarly rejected under Long.

As per independent claim 24, the applicant discloses the limitations similar to those in claim 1. Long further discloses identifying an area to be void of digital images (paragraphs 0065-0067: Here, non-printable areas are areas which are to be void of digital images). Claim 24 is similarly rejected under Long.

As per dependent claim 25, the applicant discloses the limitations similar to those in claim 1. Long further discloses identifying at least one digital image and the location of the at least one predetermined image location (paragraph 0066). Claim 25 is similarly rejected under Long.

As per independent claim 27, the applicant discloses the limitations similar to those in claims 25. Claim 25 is similarly rejected under Long.

As per dependent claim 28, Long and Kutcha disclose the limitations similar to those in claim 1 and the same rejection is incorporated herein. Long further discloses positioning images isotropically (paragraphs 0048-0049). Long fails to specifically disclose scaling of images, however, Kutcha discloses image scaling (column 12, lines 57-62). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Kuchta with Long, since it would have allowed a

user to fit images to a page for printing without changing the image's aspect ratio (Kuchta: column 12, lines 57-62).

As per dependent claim 29, Long and Kutcha disclose the limitations similar to those in claim 1, and the same rejection is incorporated herein. Long further discloses wherein grouping the plurality of images further comprising an aesthetic balance of images (paragraphs 0048-0049). Long fails to specifically disclose resizing of images, however, Kutcha discloses image resizing (column 12, lines 57-62). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Kuchta with Long, since it would have allowed a user to fit images to a page for printing without changing the image's aspect ratio (Kuchta: column 12, lines 57-62).

As per dependent claim 30, Long and Kutcha disclose the limitations similar to those in claim 1, and the same rejection is incorporated herein. Long further discloses randomly rotating an image or rotating the image in a predetermined pattern (Figures 1-2).

As per dependent claim 31, Long and Kutcha disclose the limitations similar to those in claim 1, and the same rejection is incorporated herein. Long further discloses spatially balancing the white space between the plurality of digital images (paragraphs 0048-0049).

6. Claims 5, 8, 10-12, and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Long and Kutcha and further in view of Rzepkowski et al. (US 6741270, filed 19 January 2000, hereafter Rzepkowski).

As per dependent claim 5, Long and Kutcha disclose the limitations similar to those in claim 1, and the same rejection is incorporated herein. Long fails to specifically disclose scaling digital images by different amounts. However, Rzepkowski discloses scaling digital images by different amounts (Figure 7: Here, an image can be scaled proportional to the original image dimensions or by a different amount scaled to fit within a specified height and width).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Long's method with Rzepkowski's method, since it would have allowed a user to fit an image into a fixed-area region (Rzepkowski: column 2, lines 5-10).

As per dependent claim 8, Long and Kutcha disclose the limitations similar to those in claim 1, and the same rejection is incorporated herein. Long fails to specifically disclose scaling digital images such that they fit within the page format. However, Rzepkowski discloses scaling digital images such that they fit within the page format (Figure 7; column 2, lines 35-50).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Long's method with Rzepkowski's method, since it would have allowed a user to fit an image into a fixed-area region (Rzepkowski: column 2, lines 5-10).

As per dependent claim 10, Long and Kutcha disclose the limitations similar to those in claim 9, and the same rejection is incorporated herein. Long fails to specifically

disclose scaling an image. However, Rzepkowski discloses scaling an image (Figure 7).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Long's method with Rzepkowski's method, since it would have allowed a user to fit an image into a fixed-area region (Rzepkowski: column 2, lines 5-10).

As per dependent claim 11, Long and Kutcha disclose the limitations similar to those in claim 9, and the same rejection is incorporated herein. Long fails to specifically disclose rotating an image. However, Rzepkowski discloses image rotation (Figure 6, item 534; column 9, lines 20-32).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Long's method with Rzepkowski's method, since it would have allowed a user to create an aesthetically pleasing document (Long: paragraph 0023).

As per dependent claim 12, Long, Kutcha, and Rzepkowski disclose the limitations similar to those in claim 8, and the same rejection is incorporated herein. Rzepkowski further discloses the method wherein the scaling comprises reducing the size of the digital images (Figure 7: Here, the scaling can be either a reduction or enlargement in size).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Long's method with Rzepkowski's method, since

it would have allowed a user to fit an image into a fixed-area region (Rzepkowski: column 2, lines 5-10).

As per dependent claim 14, Long, Kutcha, and Rzepkowski disclose the limitations similar to those in claim 12, and the same rejection is incorporated herein. Long further discloses the method wherein the white space is determined vertically between adjacent images in the page layouts (paragraph 0048).

As per dependent claim 14, Long and Rzepkowski disclose the limitations similar to those in claim 12, and the same rejection is incorporated herein. Long further discloses the method wherein the white space is determined horizontally between adjacent images in the page layouts (paragraph 0049).

7. Claims 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Long and Kutcha and further in view of Arledge, Jr. et al. (US 6535294, filed 23 June 1998, hereafter Arledge).

As per dependent claim 17, Long and Kutcha disclose the limitations similar to those in claim 16, and the same rejection is incorporated herein. Long fails to specifically disclose the system wherein the computer can be accessed remotely over a communication network. However, Arledge discloses the system wherein the computer can be accessed remotely over a communication network (column 4, line 65- column 5, line 3).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Long's system with Arledge's system, since it

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would have allowed a user to create a customized product (Arledge: column 5, lines 17-26).

As per dependent claim 18, Long, Kutcha, and Arledge disclose the limitations similar to those in claim 17, and the same rejection is incorporated herein. Arledge further discloses the system wherein the computer is accessed by a second computer (column 3, lines 18-38).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Long and Arledge's system with Arledge's system, since it would have allowed a user at a remote computer to create a customized product over a network (Arledge: column 5, lines 17-26).

As per dependent claim 19, Long, Kutcha, and Arledge disclose the limitations similar to those in claim 18, and the same rejection is incorporated herein. Arledge further discloses the system wherein the software program is run on the first computer (column 5, lines 17-49).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Long and Arledge's system with Arledge's system, since it would have allowed a user at a remote computer to create a customized product over a network (Arledge: column 5, lines 17-26).

As per dependent claim 20, Long, Kutcha, and Arledge disclose the limitations similar to those in claim 18, and the same rejection is incorporated herein. Arledge further discloses the system wherein the second computer is a personal computer of a

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customer (column 7, lines 30-50: Here, a client computer is a personal computer of a customer).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Long and Arledge's system with Arledge's system, since it would have allowed a user at a remote computer to create a customized product over a network (Arledge: column 5, lines 17-26).

As per dependent claim 21, Long, Kutcha, and Arledge disclose the limitations similar to those in claim 17, and the same rejection is incorporated herein. Arledge further discloses the system wherein the computer is a retail kiosk (column 2, lines 42-54).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Long and Arledge's system with Arledge's system, since it would have allowed a user at a remote computer to create a customized product over a network (Arledge: column 5, lines 17-26).

8. Claims 13 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Long and Kutcha and further in view of Bolnick et al. (US 6043817, filed 30 September 1997, hereafter Bolnick).

As per dependent claim 13, Long and Kutcha disclose the limitations similar to those in claim 1, and the same rejection is incorporated herein. Long fails to specifically disclose providing a border on a page. However, Bolnick discloses providing a border (column 10, lines 47-54).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Long's method with Bolnick's method, since it would have allowed a user to position images within the display region.

As per dependent claim 26, Long and Kutcha disclose the limitations similar to those in claim 25, and the same rejection is incorporated herein. Long fails to specifically disclose the user request of another page layout. However, Bolnick discloses a user request for a modified page layout (column 5, lines 7-25).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Long's method with Bolnick's method, since it would have allowed a user to modify a layout to fit user preferences.

Response to Arguments

9. Applicant's arguments with respect to claims 1-2 and 4-31 have been considered but are moot in view of the new ground(s) of rejection.

The examiner has applied the notoriously well known advantageous of minimizing white space on a page, thereby reducing the amount of wasted space.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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- Loui et al. (US6636648, patented 21 October 2003): Discloses balancing images over a plurality of pages to minimize the collective white space of the layout of the plurality of pages.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyle R. Stork whose telephone number is (571) 272-4130. The examiner can normally be reached on Monday-Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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CESAR PAULA
PRIMARY EXAMINER

